

This listing of claims replaces all prior versions and listings:

**Listing of Claims:**

1. (Currently Amended) A computer-implemented method for a computer-program module to provide application security threat-modeling, the method comprising:

providing class definitions for a plurality of model components to represent respective elements of an application, each ~~model-component~~ class definition specifying a set of potential security threats associated with the model component~~categories potentially applicable to the component~~;

responsive to user input, interconnecting at least a subset of the model components to form a logical model of the application; and

marking one of the potential security threats associated with a selected model component as a countered security threat;

automatically analyzing the at least a subset of model components and respective interconnections to identify a set of potential security threats corresponding to the at least a subset, the potential security threats being associated with one or more of the security threat categories; and

providing the identified set of potential security threats.

2. (Previously Presented) The method of claim 1, wherein the model components comprise a module, a port, a store, or a wire.

3. (Currently Amended) The method of claim 1, wherein the ~~security threat categories~~ potential security threats comprise at least one subset of authentication, authorization, auditing, privacy, integrity, availability, and non-repudiation.

4. (Currently Amended) The method of claim 1, wherein providing the class definitions further comprises determining the potential security threats ~~categories~~ based on functionality of the component with respect to the application.

5. (Currently Amended) The method of claim 1, wherein analyzing further comprises responsive to selection of a particular component of the model components, displaying each other component of the at least a subset that comprise at least a subset of similar potential security threats ~~categories~~ as the particular component.

6. (Currently Amended) The method of claim 1, further comprising:  
marking an additional potential security threat associated with a second  
selected component as a second countered security threat, wherein the second  
countered security threat and the countered security threat are substantially the  
same security threat;

wherein analyzing further comprises responsive to selection of the second  
selected component ~~a particular component of the at least a subset~~, automatically  
~~displaying-highlighting the selected component~~ ~~each other component of the at~~  
~~least a subset that comprises a particular security threat similar to a security threat~~  
~~already addressed with respect to the particular component.~~

7. (Currently Amended) The method of claim 1, wherein analyzing  
further comprises providing for selection of a particular threat ~~associated with the~~  
~~security threat categories~~ to indicate that the particular threat requires a threat  
mitigating implementation in a particular model component of the at least a subset.

8. (Previously Presented) The method of claim 7, wherein providing  
for selection of the particular threat further comprises identifying a priority of the  
threat mitigating implementation.

9. (Previously Presented) The method of claim 7, wherein providing  
for selection of the particular threat further comprises identifying a desired level of  
strength of technology with which to mitigate the particular threat.

10. (Previously Presented) The method of claim 7, wherein providing for selection of the particular threat further comprises presenting information associated with a particular technology with which to mitigate the one or more potential threats in a physical implementation of the application.

11. (Currently Amended) A computer-readable medium comprising computer-executable instructions for providing application security threat-modeling, the computer-executable instructions comprising instructions for:

defining a plurality of model components to represent respective elements of an application, each model component specifying a set of potential security threats associated with categories-potentially-applicable-to the component, the model components being defined with class definitions in a component schema;

interconnecting, responsive to user input, at least a subset of the model components to form a logical model of the application; and

marking one of the potential security threats associated with a selected model component as a countered security threat; and

analyzing the at least a subset and respective interconnections to identify a set of potential security threats associated with associated ones of the security threat categories.

12. (Previously Presented) The computer-readable medium of claim 11, wherein the model components comprise a module, a port, a store, or a wire.

13. (Currently Amended) The computer-readable medium of claim 11, wherein the potential security threats ~~security threat categories~~ comprise at least one subset of authentication, authorization, auditing, privacy, integrity, availability, and non-repudiation.

14. (Currently Amended) The computer-readable medium of claim 11, wherein the computer-executable instructions for defining the model components further comprise instructions for determining the potential security threats ~~categories~~ for a component of the model components based on functionality of the component in the application.

15. (Previously Presented) The computer-readable medium of claim 11, wherein the computer-executable instructions for analyzing further comprise instructions for:

responsive to selection of a particular component in the logical model, displaying each other component in the logical model that comprise at least a subset of similar potential security threats as the particular component.

16. (Currently Amended) The computer-readable medium of claim 11, wherein the computer-executable instructions for analyzing further comprise instructions for:

marking an additional potential security threat associated with a second selected component as a second countered security threat, wherein the second countered security threat and the countered security threat are substantially the same security threat; and

responsive to selection of the second selected component a particular component in the logical model, automatically displaying highlighting the selected component each other component in the logical model that comprises a particular security threat similar to a security threat already addressed with respect to the particular component.

17. (Currently Amended) The computer-readable medium of claim 11, wherein the computer-executable instructions for analyzing further comprise instructions for providing for selection of a particular threat associated with the security threat categories to indicate that the particular threat requires a threat mitigating implementation in a particular component of the logical model.

18. (Previously Presented) The computer-readable medium of claim 17, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for identifying a priority that corresponds to the threat mitigating implementation.

19. (Previously Presented) The computer-readable medium of claim 17, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for identifying a desired level of strength of technology with which to mitigate the particular threat.

20. (Previously Presented) The computer-readable medium of claim 17, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for presenting information associated with a particular technology with which to mitigate the one or more potential threats in a physical implementation of the application.

21. (Currently Amended) A device comprising:

a memory comprising computer-executable instructions for providing application security threat-modeling;

a processor that is operatively coupled to the memory, the processor being configured to fetch and execute the computer-executable instructions from the memory, the computer-executable instructions comprising instructions for:

providing class definitions defining attributes of model components representing respective elements of an application, at least one attribute of the attributes associated with a model component specifying a set of potential security threats ~~categories~~ ~~potentially~~ applicable to the model component;

presenting symbols associated with at least a subset of the model components on a display;

interconnecting respective ones of the at least a subset to form a logical model of the application; ~~and~~

marking one of the potential security threats associated with a selected model component as a countered security threat; and

analyzing the logical model in view of potential security threats ~~categories~~ associated with respective ones of the model components in the logical model to identify a set of potential security threats to the application.

22. (Previously Presented) The device of claim 21, wherein the model components comprise a module, a port, a store, or a wire.



23. (Currently Amended) The device of claim 21, wherein the potential security threats categories comprise at least one subset of authentication, authorization, auditing, privacy, integrity, availability, and non-repudiation

24. (Currently Amended) The device of claim 21, wherein the computer-executable instructions for providing further comprise instructions for determining the potential security threats categories for a component of the model components based on functionality of the component in the application.

25. (Previously Presented) The device of claim 21, wherein the computer-executable instructions for analyzing further comprise instructions for responsive to selection of a particular component of the logical model, displaying each other component of the logical model that comprise at least a subset of similar potential security threats as the particular component.

26. (Currently Amended) The device of claim 21, wherein the computer-executable instructions for analyzing further comprise:

instructions for marking an additional potential security threat associated with a second selected component as a second countered security threat, wherein the second countered security threat and the countered security threat are substantially the same security threat;

instructions responsive to selection of the second selected component a particular component of the model components, for automatically highlighting the selected component ~~displaying each other component of the logical model that comprises a particular security threat similar to a security threat already addressed with respect to the particular component.~~

27. (Currently Amended) The device of claim 21, wherein the instructions for analyzing further comprise instructions for providing for selection of a particular threat ~~associated with the security threat categories~~ to indicate that the particular threat requires a threat mitigating implementation in a particular model component of the logical model, the particular threat corresponding to the particular model component.

28. (Previously Presented) The device of claim 27, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for identifying a priority that corresponds to the threat mitigating implementation.

29. (Previously Presented) The device of claim 27, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for identifying a desired level of strength of technology with which to mitigate the particular threat.

30. (Previously Presented) The device of claim 27, wherein the computer-executable instructions for providing for selection of the particular threat further comprise instructions for presenting information associated with a particular technology with which to mitigate the one or more potential threats in a physical implementation of the application.

31. (Currently Amended) A computing device comprising:  
processing means for presenting a user interface for application security threat-modeling, the processing means comprising:

means for displaying and interconnecting a plurality of model components to design a logical model of an application, at least a subset of the model components comprising a corresponding set of potential security threat characteristics defined in a schema of class definitions for the model components;

means for specifying a component of the model components in the logical model;

means for identifying a set of potential security threats in view of one or more of module, port, store, or wire attributes associated with the at least a subset of model components that comprise the logical model; and

means for marking one of the potential security threats associated with a selected model component as a countered security threat;

means for selecting a particular solution to mitigate the potential security threats in ~~in~~ the logical model.

32. (Canceled)

33. (Previously Presented) The computing device of claim 31, wherein the corresponding security threat characteristics comprise at least one subset of authentication, authorization, auditing, privacy, integrity, availability, and non-repudiation.

34. (Previously Presented) The computing device of claim 31, wherein the processing means further comprise means for selecting a priority that corresponds to the potential security threats.

35. (Previously Presented) The computing device of claim 31, wherein the means for selecting further comprise means for specifying a desired level of strength of technology with which to mitigate the potential security threats.

36. (Previously Presented) The computing device of claim 31, wherein the processing means further comprise means for selecting a particular technology with which to mitigate the potential security threats in a physical implementation of the application.

37. (New) The method of claim 1, further comprising:  
determining that the countered security threat neutralizes one of the  
potential security threats associated with a model component other than the  
selected model component; and  
revising the set of potential security threats associated with at least one of  
model components other than the selected model component by removing the  
neutralized potential security threat from the set.

38. (New) The method of claim 37, further comprising automatically generating computer code configured to prevent the potential security threat marked as the countered security threat in response to the marking.

39. (New) The method of claim 11, further comprising instructions for:  
determining that the countered security threat neutralizes one of the potential security threats associated with a model component other than the selected model component; and

revising the set of potential security threats associated with at least one of model components other than the selected model component by removing the neutralized potential security threat from the set.

40. (New) The method of claim 39, further comprising instructions for automatically generating computer code configured to prevent the potential security threat marked as the countered security threat in response to the marking.

41. (New) The method of claim 21, wherein the computer-executable instructions further comprise instructions for:

determining that the countered security threat neutralizes one of the potential security threats associated with a model component other than the selected model component; and

revising the set of potential security threats associated with at least one of model components other than the selected model component by removing the neutralized potential security threat from the set.

42. (New) The method of claim 41, wherein the computer-executable instructions further comprise instructions for automatically generating computer code configured to prevent the potential security threat marked as the countered security threat in response to the marking.

43. (New) The method of claim 31, wherein the processing means further comprise:

means for determining that the countered security threat neutralizes one of the potential security threats associated with a model component other than the selected model component; and

means for revising the set of potential security threats associated with at least one of model components other than the selected model component by removing the neutralized potential security threat from the set.

44. (New) The method of claim 43, wherein the processing means further comprises instructions for automatically generating computer code configured to prevent the potential security threat marked as the countered security threat in response to the marking.